UNITED STATES DEPARTMENT OF COMMERC United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

36257

7590

03/05/2004

PARSONS HSUE & DE RUNTZ LLP 655 MONTGOMERY STREET SUITE 1800 SAN FRANCISCO, CA 94111 EXAMINER

WEISS, HOWARD

ART UNIT PAPER NUMBER

2814

DATE MAILED: 03/05/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,696	10/31/2001	Eliyahou Harari	11587 M-12336 US	4652

TITLE OF INVENTION: MULTI-STATE NON-VOLATILE INTEGRATED CIRCUIT MEMORY SYSTEMS THAT EMPLOY DIELECTRIC STORAGE ELEMENTS

APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	06/07/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- □ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

INSTRUCTIONS: This for	rm should be used for trans	smitting the ISSU	or <u>F</u>			
indicated unless corrected I maintenance fee notification	below or directed otherwise	Patent, advance ordin Block 1, by (a)	ders and notifi) specifying a	UBLICATION FEE (if req ication of maintenance fees new correspondence addres	uired). Blocks 1 through 4 s will be mailed to the current s; and/or (b) indicating a sep	should be completed when t correspondence address a arate "FEE ADDRESS" for
	E ADDRESS (Note: Legibly mark-up	with any corrections or	use Block 1)	papers. Each addition	of mailing can only be used in this certificate cannot be used nal paper, such as an assignmente of mailing or transmission.	ent or formal drawing, mus
PARSONS HSUE & DE RUNTZ LLP 655 MONTGOMERY STREET SUITE 1800 SAN FRANCISCO, CA 94111		Þ	I hereby certify that States Postal Servic addressed to the M		Certificate of Mailing or Transmission this Fee(s) Transmittal is being deposited with the Unit e with sufficient postage for first class mail in an envelo lail Stop ISSUE FEE address above, or being facsim SPTO, on the date indicated below.	
	, -					(Depositor's name
						(Signature
						(Date
APPLICATION NO.	FILING DATE	1	FIRST NAMED	INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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nonprovisional	NO	\$1330	·	\$300	\$1630	06/07/2004
EXAM	MINER	ART UN	IT	CLASS-SUBCLASS		
WEISS, I	łoward	2814		257-324000	_	
CFR 1.363). Change of corresponded Address form PTO/SB/I: "Fee Address" indicati	e address or indication of "Fo ence address (or Change of C 22) attached. ion (or "Fee Address" Indicat or more recent) attached. Use	Correspondence	names of agents OR, firm (havin agent) and	ting on the patent front page up to 3 registered patent, alternatively, (2) the name ag as a member a registered the names of up to 2 registered. If no name is list ted.	attorneys or 1e of a single diattorney or 2stered patent	
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		ow, no assignee da submitted under sep	ata will appear parate cover. C	• • • •	assignee data is only appropr DT a substitute for filing an as: DUNTRY)	iate when an assignment ha signment.
Please check the appropriate	e assignee category or catego	ries (will not be pri	inted on the pa	ntent); 🖸 individual 🚨	corporation or other private g	group entity 🚨 governmen
4a. The following fee(s) are	enclosed:	4b	. Payment of F	Fee(s):		
☐ Issue Fee			☐ A check in	the amount of the fee(s) is e	nclosed.	
☐ Publication Fee				y credit card. Form PTO-203		
☐ Advance Order - # of	Copies		☐ The Direct Deposit Acco	tor is hereby authorized by unt Number	charge the required fee(s), or (enclose an extra	credit any overpayment, to copy of this form).
Director for Patents is reque	sted to apply the Issue Fee an	nd Publication Fee	(if any) or to r	e-apply any previously paid	issue fee to the application id	
(Authorized Signature)		(Date)				
	d Publication Fee (if require a registered attorney or agreed of the United States Particular is required by 37 CFR by the public which is to five					

obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,696	10/31/2001	Eliyahou Harari	11587 M-12336 US	4652
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SUITE 1800	WERT STREET		ART UNIT	PAPER NUMBER
SAN FRANCIS	CO, CA 94111		2814	

DATE MAILED: 03/05/2004

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)
	10/002,696	HARARI ET AL.
Notice of Allowability	Examiner	Art Unit
	Howard Weiss	2814
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT Report of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this appropriate communication IGHTS. This application is subject and MPEP 1308.	oplication. If not included n will be mailed in due course. THIS
_	<u>12/24/03</u> .	
2. The allowed claim(s) is are <u>13,15-23 and 25-41</u> .		
3. The drawings filed on are accepted by the Examine	r.	
 4. ☐ Acknowledgment is made of a claim for foreign priority ur a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	e been received. e been received in Application No	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements
5. A SUBSTITUTE OATH OR DECLARATION must be subminformal PATENT APPLICATION (PTO-152) which give	uitted. Note the attached EXAMINER reason(s) why the oath or declar	R'S AMENDMENT or NOTICE OF ration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner' Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the sheet i	son's Patent Drawing Review(PTC . s Amendment / Comment or in the .84(c)) should be written on the draw	Office action of ings in the front (not the back) of
7. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIAL FOR THE DEPOSIT OF BIOLOGIC	must be submitted. Note the CAL MATERIAL.
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 1203 & 0104 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. Interview Summar Paper No./Mail Da 7. Examiner's Amend 8. Examiner's Statem 9. Other	Iment/Comment The American Allowance
·		DRY PRIMARY E CONTERM

Application/Control Number: 10/002,696

Art Unit: 2814

Attorney's Docket Number: M-12336 US

Filing Date: 10/31/01

Continuing Data: RCE established 5/7/03

Claimed Foreign Priority Date: none

Applicant(s): Harari et al. (Samachisa, Yuan, Guterman)

Examiner: Howard Weiss

Reasons for Allowance

1. Claims 13, 15 to 23 and 25 to 41 are allowed.

2. The following is an examiner's statement of reasons for allowance: a non-volatile memory device as claimed including two distinct charge storage regions located in a dielectric and displaced from each other and from the source and drain regions along the channel of the memory cells could not be anticipated nor, in combination, be rendered obvious over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Papers related to this application may be submitted directly to Art Unit 2814 by facsimile transmission. Papers should be faxed to Art Unit 2814 via the Art Unit 2814 Fax Center located in Crystal Plaza 4, room 3C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The Art Unit 2814 Fax Center number is (703) 308-7722 or -7724. The Art Unit 2814 Fax Center is to be used only for papers related to Art Unit 2814 applications. The official TC2800 Before-Final, (703) 872-9318, and After-Final,

Art Unit: 2814

(703) 872-9319, Fax numbers will provide the fax sender with an auto-reply fax verifying receipt of their fax by the USPTO.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard Weiss at (571) 272-1720 and between the hours of 8:00 AM to 4:00 PM (Eastern Standard Time) Monday through Friday or by e-mail via Howard.Weiss@uspto.gov.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group 2800 Receptionist at **(703) 308-0956**.

5. The following list is the Examiner's field of search for the present Office Action:

Field of Search	Date
U.S. Class / Subclass(es): 257/ 324, 326	thru 2/23/04
Other Documentation: none	
Electronic Database(s): EAST, IEL	thru 2/23/04

HW/hw 24 February 2004 Howard Weiss Examiner Art Unit 2814